

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A high-strength bolt having a tensile strength of 1,200 N/mm² or more that is superior in delayed fracture resistance and relaxation resistance, wherein the bolt is prepared by: wire-drawing a bolt steel containing the following elements: C: 0.5 to 1.0% (mass %, the same shall apply hereinafter), Si: 0.55 to 3%, Mn: 0.2 to 2%, P: 0.03% or less (but not 0%), S: 0.03% or less (but not 0%), and Al: 0.3% or less (but not 0%), and containing proeutectoid ferrite, proeutectoid cementite, bainite and martensite at a total areal rate of less than 20% and pearlite in balance; cold-heading the wire into a bolt shape; and then subjecting the bolt comprising 0.55% to 3% Si to a bluing treatment ~~the bolt~~ in a temperature range of 100 to 500°C.
2. (Original): The high-strength bolt according to Claim 1, wherein the bolt steel further comprises at least one of the following elements: Cr: 2.5% or less (but not 0%) and Co: 0.5% or less (but not 0%).
3. (Original): The high-strength bolt according to Claim 1, wherein the bolt steel further comprises Ni at 1.0% or less (but not 0%).
4. (Original): The high-strength bolt according to Claim 1, wherein the bolt steel further comprises Cu at 1.0% or less (but not 0%).
5. (Original): The high-strength bolt according to Claim 1, wherein the bolt steel further comprises at least one element selected from Mo, V, Nb, Ti, and W in a total amount of 0.5% or less (but not 0%).

Application No. 10/591,475
Response to Office Action dated June 2, 2008

6. (Original): The high-strength bolt according to Claim 1, wherein the bolt steel further comprises B at 0.003% or less (but not 0%).

7. (Original): The high-strength bolt according to Claim 2, wherein the bolt steel further comprises Ni at 1.0% or less (but not 0%).

8. (Original): The high-strength bolt according to Claim 2, wherein the bolt steel further comprises at least one element selected from Mo, V, Nb, Ti, and W in a total amount of 0.5% or less (but not 0%).

9. (Original): The high-strength bolt according to Claim 2, wherein the bolt steel further comprises B at 0.003% or less (but not 0%).

10. (Original): The high-strength bolt according to Claim 7, wherein the bolt steel further comprises at least one element selected from Mo, V, Nb, Ti, and W in a total amount of 0.5% or less (but not 0%).

11. (Original): The high-strength bolt according to Claim 1, wherein the elements in balance are Fe and inevitable impurities.

12. (New): The high-strength bolt according to Claim 1, wherein the bolt comprises Si in an amount of 1% to 3%.

13. (New): The high-strength bolt according to Claim 1, wherein the temperature for the bluing treatment ranges from 200°C to 500°C.

14. (New): The high-strength bolt according to Claim 2, wherein the bolt comprises Cr in an amount of 0.5% to 2.5%.

15. (New): A high-strength bolt having a tensile strength of at least 1,200 N/mm², wherein the bolt is prepared by wire-drawing a bolt steel comprising: C: 0.5 to 1.0% by mass,

Application No. 10/591,475
Response to Office Action dated June 2, 2008

Si: 0.55 to 3% by mass, Mn: 0.2 to 2% by mass, P: 0.03% or less by mass, S: 0.03% or less by mass, and Al: 0.3% or less by mass, and containing proeutectoid ferrite, proeutectoid cementite, bainite and martensite at a total areal rate of less than 20% and pearlite in balance; cold-heading the wire into a bolt shape; and then subjecting the bolt to a bluing treatment in a temperature range of 100 to 500°C.

16. (New): The high-strength bolt according to Claim 15, wherein the bolt steel further comprises 2.5% or less by mass of Cr, 0.5% or less by mass of Co, or both.

17. (New): The high-strength bolt according to Claim 15, wherein the bolt steel further comprises Ni at 1.0% or less by mass.

18. (New): The high-strength bolt according to Claim 15, wherein the bolt steel further comprises Cu at 1.0% or less by mass.